

# Work Order ID 94113

**\*94113\***

Page 1

November-30-12 9:21:44 AM

Item ID: D4019-3 ~ Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Rib  
 Start Date: 11/30/12 Start Qty: 1.00 **\*1\*** Cust Item ID:  
 Required Date: 12/14/12 Req'd Qty: 1.00 **\*1\*** Customer:

## Reference:

Approvals: Process Plan: MJS Date: 12-12-03 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_  
 Run Start **\*NR1\***  
 Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
<b>Draw Nbr</b>	<b>Revision Nbr</b>								
D4019	D								
100		0.00							
<b>*100*</b>									
Large Fab	Memo	0.00							
Large Fab	1- Cut tube as per dwg D4019 2- remove identification marks and deburr								
110	QC6- Inspect dimensions to drawing	0.00							
<b>*110*</b>									
QC	Memo	0.00							
Quality Control									
120	Identify as per dwg & Stock Location: _____	0.00							
<b>*120*</b>									
Packaging	<b>Backlot cell</b>	0.00							
Packaging	Memo								

⑫ /me 13-04-15  
 12v LY 13.04.15  
 12x LY 13.04.15

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY			
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other

**Work Order ID 94113****\*94113\***

Page 2

November-30-12 9:21:44 AM

Item ID: D4019-3

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Rib

Start Date: 11/30/12 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 12/14/12 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC21- Final Inspection - Work Order Release	0.00							
<b>*130*</b>									
QC	Memo	0.00							
Quality Control									

13/4/16 

13-04-16

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/>  Machining <input type="checkbox"/>  Thermoforming <input type="checkbox"/>  Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/>  Small Fab <input type="checkbox"/>  Finishing <input type="checkbox"/>  Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/>  Prod. Eng. Coord. <input type="checkbox"/>  Rec/Store/Packaging <input type="checkbox"/>  Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/>  Quality <input type="checkbox"/>  Other <input type="checkbox"/> </div> </div>			
Part No. _____					
NCR No. _____					

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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# Picklist Print

November-30-12 9:21:44 AM

Page 1

Work Order ID: 94113

Parent Item: D4019-3

Parent Item Name: Rib

Start Date: 11/30/12

Required Date: 12/14/12

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: new issue DD 10.01.25 verified by:EC IPP Rev:B as per dwg revA 10.03.15  
verified by:EC IPP Rev:C as per dwg revC DD 10.04.20 verified by:EC IPP Rev:D  
as per dwg revD DD 10.08.18 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6TS0.750W.062 6061-T6 SQ Tube .75 x .75 x .062W		Purchased	No			100	f	129.2042	1.75	1.8421053		CC 13-4-15	

Location

Loc Qty

Loc Code

MAT013

129.2042

122200

129.2042

22,10.52

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

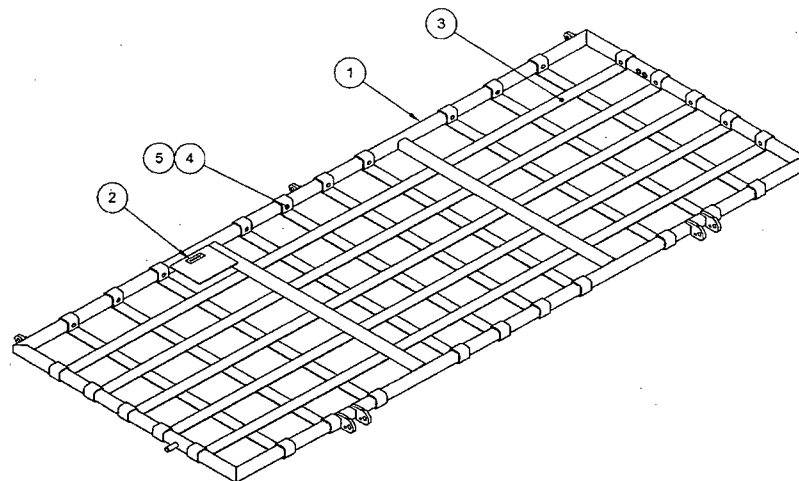
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	<b>Date</b>	<b>Step</b>	<b>Qty</b>	<b>Description of work order update or Non-conformance</b>	<b>Initial Chief Eng</b>	<b>Action Description</b>	<b>Sign &amp; Date</b>	<b>Verification</b>	<b>QC Inspector</b>		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY			
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4019-041	LIGHT LID SHORT BASKET ASSY
1	1	D4019-101	BASKET LID WELDMENT ASSY
2	1	D2728-1	DART LOGO LABEL
3	1	D4029-043	WEBBING (SHORT BASKET)
4	30	MS20600AD4W3	BLIND RIVET
5	30	NAS1149DN416J	WASHER



**D4019-041 LIGHT LID SHORT BASKET ASSY**

**NOTES:**

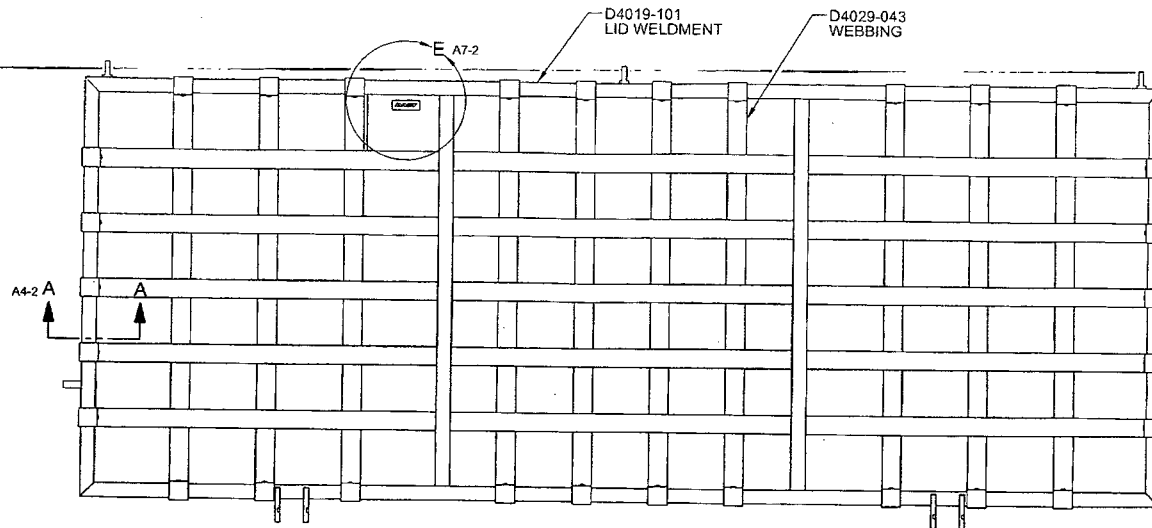
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 4.83 lbs

SUBMIT  
 TO  
 ENGINEER  
 UNCONTROLLED  
 SUBJECT  
 WITH  
 WORK  
 NO. **94113 MLJ**  
**12-12-03**

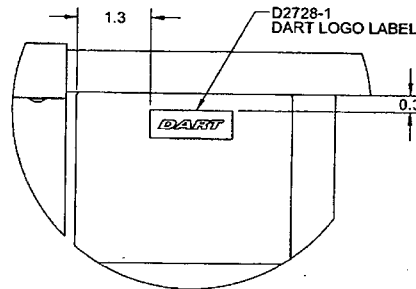
**RELEASED**  
 10.08.12  
 ECN 10-516

D	REORGANIZED BILL OF MATERIALS: SEPARATED -101 FROM -041 (D6-1, D6-3); REORGANIZED VIEWS ON SHT 3 ACCORDINGLY; REMOVED D4086-243, UPDATED VIEW E ACCORDINGLY (A7-2); REASON: NOW INSTALLED BY OPERATORS PER D350-607-2 REV. C AND D350-607-3 REV. A.	MB	10.08.05
C	MS20600AD4W3 WAS MS20600AD4WS: BOM & (B3-2)	JPH	10.04.06
B	BOM: INSERTED QTY 1 D2728-1 AS ITEM 4 & QTY 1 D4086-243 PLACARD AS ITEM 11. ITEMS RENUMBERED AS REQD. DETAIL E ADDED (A7-2) & (D5-2). SECTION B-B REV'D (D6-3) DIM ADDED (B4-3); WELD SYMBOL REVISED (D5-3)	JPH	10.03.25
A	NEW ISSUE	JPH	10.03.04
REV.	DESCRIPTION	BY	DATE
DESIGN	ALB	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	A		
CHECKED	SC	DRAWING NO.	REV. D
MFG. APPR.	SC	<b>D4019</b>	SHEET 1 OF 4
APPROVED	SC	TITLE	SCALE
DE APPR.	SC	<b>LIGHT LID SHORT BASKET</b>	NTS
DATE	<b>10.08.05</b>	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

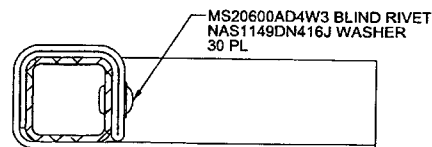
94113



**D4019-041 LIGHT LID SHORT BASKET ASSY**



**DETAIL E D5-2**



**SECTION A-A C7-2**

**RELEASED**  
10 DEC 12 9

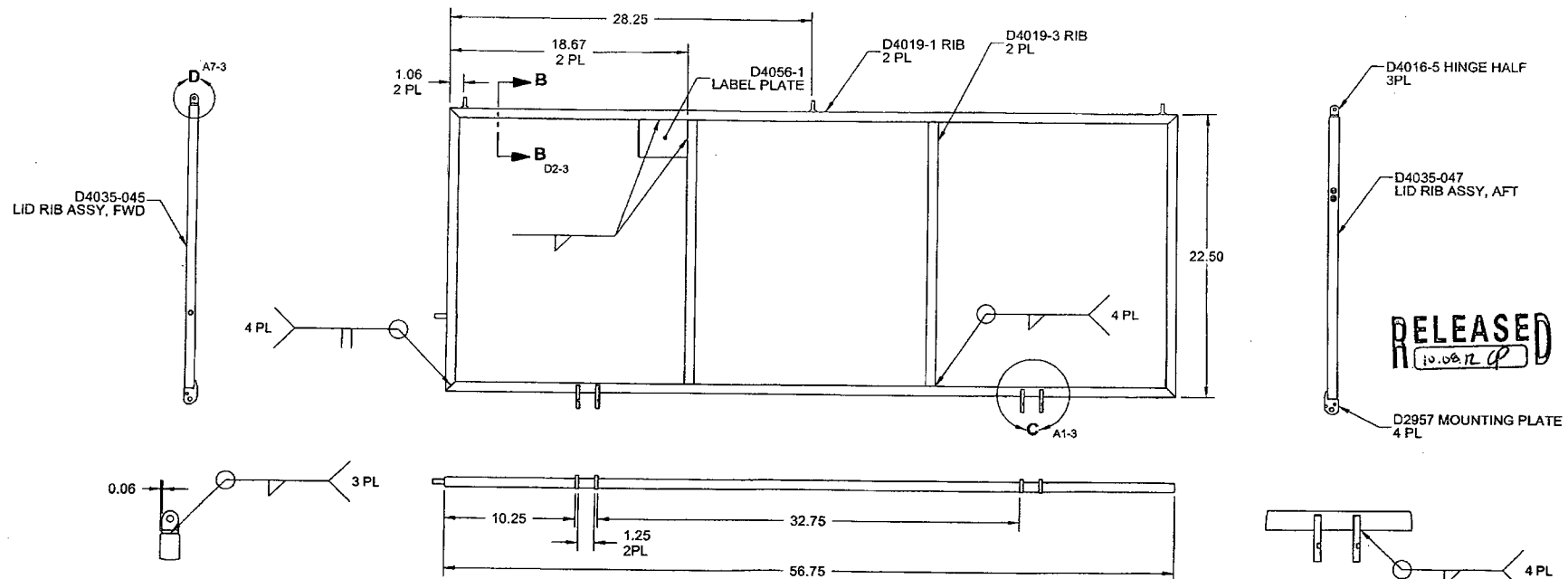
DESIGN	AS	<b>DART AEROSPACE LTD</b>	
DRAWN	SC	HAWKESBURY, ONTARIO, CANADA	
CHECKED	SC	DRAWING NO. <b>D4019</b>	REV. D
MFG. APPR.	SC	SHEET 2 OF 4	
APPROVED	SC	TITLE	SCALE
DE APPR.	SC	<b>LIGHT LID SHORT BASKET</b>	NTS
DATE	10.08.05	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	



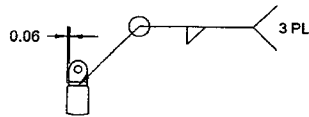
94113

ITEM	QTY	P/N	DESCRIPTION
	X	D4019-101	BASKET LID WELDMENT ASSY
1	4	D2957	MOUNTING PLATE
2	3	D4016-5	HINGE HALF, LIGHT LID
3	2	D4019-1	RIB
4	2	D4019-3	RIB
5	1	D4035-045	BASKET LID RIB ASSY, FWD (LIGHT)
6	1	D4035-047	BASKET LID RIB ASSY, AFT (LIGHT)
7	1	D4056-1	LABEL PLATE, 350 LIGHT BASKET

SECTION B-B C6-3

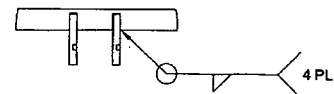


DETAIL D C7-3



D4019-101 BASKET LID WELDMENT ASSY

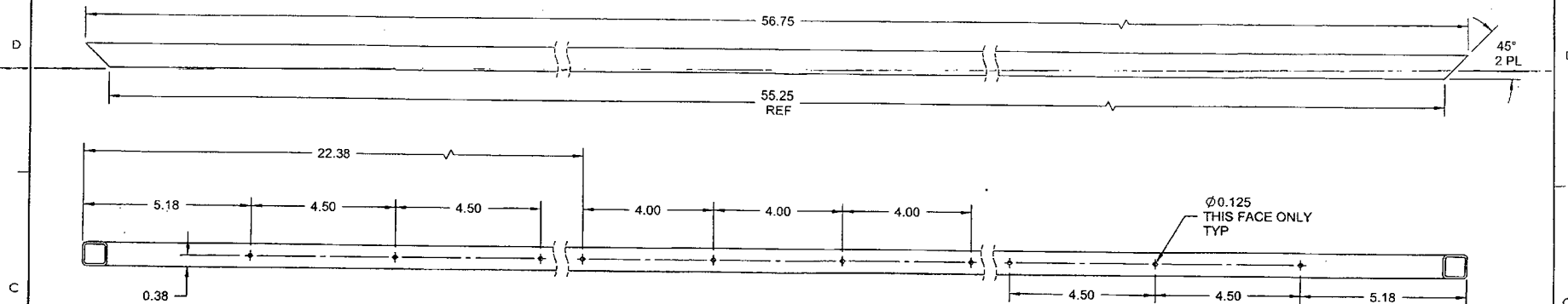
DETAIL C B3-3



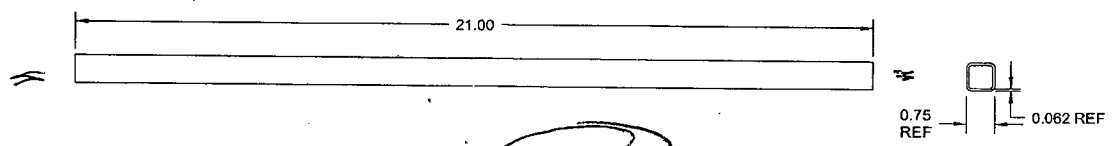
- NOTES:
- 1) MATERIAL: N/A
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 3.32 lbs
  - 8) WELD PER DART QSI 004

DESIGN	AS	DART AEROSPACE LTD	REV. D
DRAWN	Sc	HAWKESBURY, ONTARIO, CANADA	
CHECKED	Sc	DRAWING NO. D4019	SHEET 3 OF 4
MFG APPR.	Sc	TITLE	SCALE
APPROVED	Sc	LIGHT LID SHORT BASKET	NTS
DE APPR.	Sc	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
DATE	10.08.05	THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

94113



**D4019-1 RIB**



**D4019-3 RIB**

**RELEASED**  
10.08.12.09

- NOTES:**
- 1) MATERIAL: 6061-T6 (OR 6061-T651/ T6510/ T6511/ T62) SQUARE TUBING  
PER AMS-QQ-A-225/8 (OR AMS 4117/ 4128/ 4115/ 4116) OR  
PER AMS-QQ-A-200/8 (OR AMS 4160)  
REF DART SPEC. M6061T6TS0.750W.062
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT -1: 0.88 lbs  
-3: 0.77 lbs

DESIGN	AS	<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED	SC	DRAWING NO.	REV. D
MFG. APPR.		D4019	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		LIGHT LID SHORT BASKET	NTS
DATE	10.08.05	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR DISCLOSED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

